

A Standardized Procedure for Monitoring Harmful Algal Blooms in Chile by Metabarcoding Analysis

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Materials

Name	Company	Catalog Number	Comments
1.5 mL single tube	ThermoFisher	Q32856	sterile
1.5 mL tubes	ThermoFisher	2150N	sterile
8-strip 0.2 mL PCR tubes and flat cap	ThermoFisher	AB0451 & 4323032	sterile
96-well 0.2 mL PCR plate	ThermoFisher	N8010560	
AccuRuler 100 bp DNA Ladder	MaestroGen	02001-500	
Chelex 100 Chelating Resin	Bio-Rad	1432832	
Chemical Duty Vacuum Pressure Pump	MilliporeSigma	WP6122050	
D1000 Reagents	Agilent Technologies	5067-5583	
D1000 sample buffer	Agilent Technologies	5067-5602	
DNA loading dye (Blue/Orange Loading Dye 6X)	Promega	G1881	
Ethanol Molecular Biology Grade	E7023	Merck KGaA	
Filtration device	ThermoFisher	09-740-36H, 09-740-23E	
Fluorescent DNA concentration measurement kit (Qubit dsDNA HS Assay kit)	Thermo Fisher Scientific	Q32851	
Fluorometer (Qubit4 Fluorometer)	ThermoFisher	Q33238	
Fragment analysis verification matrix (D1000 ScreenTape)	Agilent Technologies	5067-5582	
Fragment Analyzer (Agilent TapeStation 4150)	Agilent	G2992AA	
GelRed Nucleic Acid Gel Stain	Biotium	41002	

Generic bench vortexer (Vortex Genie 2)	Scientific Industries	SI-0236	
Heat block			
High performance sequencing-grade DNA polymerase (KAPA HiFi Hotstart ReadyMix), 2X	Roche	KK2602	
HT1 Hybridization buffer	Illumina	20015892	
Illumina Nextera XT v2 Index Kit set A, B, C and D	Illumina	FC-131-2001, -2002, -2003, -2004	
Laminar hood cabinet	Biobase Co.	Biobase PCR-800 PCR Cabinet	
Loading tips (Specific for Agilent TapeStation systems)	Agilent Technologies	5067-5598	
Magnetic beads DNA cleanup system (ProNex® Size-Selective Purification System)	Promega	NG2002	
Magnetic stand for 96 wells (Magnetic Stand-96)	ThermoFisher	AM10027	
Micro-seal film for 96-well plate	ThermoFisher	4311971	sterile
MiSeq Reagent Kit v3	Illumina	MS-102-3003	includes pre-filled, ready-to-use reagent cartridges.
MiSeq system	Illumina	SY-410-1003	includes pre-installed software
Molecular grade nuclease-free water	Integrated DNA Technologies	11-05-01-04	
Molecular grade sodium hydroxide (NaOH) 1M	Merck KGaA	1091371000	
Multichannel pipettes	Not specified	Not specified	
Multi-Purpose Agarose	Cleaver Scientific	CSL-AG500	
Ow D2 Wide-Gel Electrophoresis System	ThermoFisher	D2	
Ow EC-105 Compact Power Supply	ThermoFisher	105ECA-115	
Pellet Pestle— Cordless Motor	ThermoFisher	K749540-0000	
PhiX control Kit v3	Illumina	FC-110-300	ready-to-use control library for Illumina sequencing
Pipette tips	Not specified	Not specified	sterile
Pipettes	Not specified	Not specified	2, 10, 20, 100, 1000 µL
Sterivex™ GP 0.22 µm filter unit	MilliporeSigma	SVGP01050	
Tabletop centrifuge	Eppendorf 5427R Centrifuge	Eppendorf AG	
TBE buffer	ThermoFisher	B52	
TE buffer (pH 8.0)	ThermoFisher	AM9849	
Terr PCR Direct FFPE Kit	Takara Bio USA	639284	includes 2X Terra PCR Direct Buffer
Terra PCR Direct Polymerase Mix, 1.25 U/µL	Takara Bio USA	639271	High performance Inhibitor-tolerant DNA polymerase
ThermalCycler (MiniAMP Plus Thermal Cycler)	ThermoFisher	A37835	
Transilluminator and image capture system	Analytik Jena, AG	GelDoc-ItS2 Imager	
Whatman 1.0 µm pore-sized membrane	MilliporeSigma	WHA111110	